AMENDMENTS TO THE SPECIFICATION

The specification has been amended as follows:

Page 3

The paragraph at lines 12-15 has been amended as follows:

Conceived to solve the conventional problems, the present invention ~~has an objective to provide~~ provides an inkjet printer which ~~dose not~~ does not produce defective prints when bubbles enter the ink supply tube.

The paragraph at lines 16-18 has been amended as follows:

~~To solve the problems, an inkjet~~ An inkjet printer in accordance with the present invention is characterized in that it includes:

Page 4

The paragraph at lines 4-6 has been amended as follows:

Thus, the invention offers an inkjet printer which does not produce defective prints when bubbles ~~enter ink~~ enter the ink supply tube.

The paragraph at lines 7-11 has been amended as follows:

Additional ~~objects,~~ advantages and novel features of the invention will be set forth in part in the description which follows, and in part will become apparent to those skilled in the art upon examination of the following or may be learned by practice of the invention.

Pages 9-10

The paragraph beginning on page 9, line 22 and ending on page 10, line 13 has been amended as follows:

Suppose that bubbles are flowing in the ink supply tube 12 from the upstream end of the air trap 13. Recall that the air trap 13 has the space 13b above the outlet 13a. The air trap 13 therefore has a greater cross ~~sectional~~ section perpendicular to the flow passage direction than the part of the flow passage immediately before the air trap 13. Bubble flow slows down where the ink flow passage has an enlarged cross section. Thus, the bubble flow across the flow passage length Lx of the air trap 13 is slower than that in the flow passage immediately before the air trap 13. A result is that the bubbles take longer to travel the flow passage length Lx (time tx). Under these conditions, the bubbles can move up higher than the height Ly of the outlet 13a of the air trap 13 and collect in the space 13b of the air trap 13 within the traveling time tx if the buoyancy of the bubbles are greater than the drag force exerted perpendicularly on bubbles.

AMENDED CLAIM SET

The claims have been amended as follows:

1. (currently amended) An inkjet printer, comprising:

a print head;

an ink tank storing ink; ~~and~~

an ink supply tube having an upstream and a downstream portion supplying the ink from the ink tank ~~to a print~~ to said print head,

a filter at said upstream portion directing ink through said supply tube from said ink tank for breaking bubbles present in said ink into smaller bubbles; and

a bubble catching section in said downstream portion, downstream of said filter and upstream of said print head for catching said smaller bubbles.

~~wherein~~

~~the ink supply tube is provided with a bubble catching section for catching bubbles in the ink~~.

2. (original) The inkjet printer as set forth in claim 1, wherein

the bubble catching section has a space extending upwards from the ink supply tube so that the bubbles float and are caught in the space before the ink is supplied to the print head via the ink supply tube.

3. (original) The inkjet printer as set forth in claim 1, wherein

the bubble catching section has a space above a downstream outlet so that the bubbles float and are caught in the space before the bubbles reach the outlet.

4. (original) The inkjet printer as set forth in claim 3, wherein

$(1/18)\cdot g\cdot d^2/\nu \geq (Ly/Lx)\cdot(Q/S_T)$

where g is a gravitational acceleration (m/s^2), d is a diameter (m) of the bubbles, ν is a dynamic viscosity (m^2/s) of the ink, Lx is a length (m) of a flow passage in the bubble catching section, Ly is a height (m) of the outlet from a bottom of the flowing ink, Q is an average ink flow per unit time (m^3/s), and S_T is a cross-sectional area (m^2) of the flow passage.

5. (original) The inkjet printer as set forth in claim 4, wherein

$(1/18)\cdot g\cdot d^2/\nu \geq (Lh/Lx)\cdot(Q/S_T)$

where Lh is a height (m) of a highest part of the space from the bottom.

6. (original) The inkjet printer as set forth in claim 3, wherein:

the ink tank is provided with a filter at an ink delivery port thereof interfacing the ink supply tube; and

$(1/18)\cdot g\cdot C^2/\nu \geq (Ly/Lx)\cdot(Q/S^T)$

where g is a gravitational acceleration (m/s^2), C is a mesh size (m) of the filter, ν is a dynamic viscosity (m^2/s) of the ink, Lx is a length (m) of a flow passage in the bubble catching section,

Ly is a height (m) of the outlet from a bottom of the flowing ink, Q is an average ink flow per unit time (m^3/s), and S_T is a cross-sectional area (m^2) of the flow passage.

7. (original) The inkjet printer as set forth in claim 6, wherein

$(1/18)\cdot g\cdot C^2/\nu \geq (Lh/Lx)\cdot(Q/S_T)$

where Lh is a height (m) of a highest part of the space from the bottom.

8. (original) The inkjet printer as set forth in claim 3, wherein

the ink tank is provided with a mesh filter at an ink delivery port thereof interfacing the ink supply tube; and

$(1/18\cdot g\cdot(2^{1/2}\cdot M)^2/\nu \geq (Ly/Lx)\cdot(Q/S_T)$

where g is a gravitational acceleration (m/s^2), M is a filter precision (m) of the mesh filter, ν is a dynamic viscosity (m^2/s) of the ink, Lx is a length (m) of a flow passage in the bubble catching section, Ly is a height (m) of the outlet from a bottom of the flowing ink, Q is an average ink flow per unit time (m^3/s), and S_T is a cross-sectional area (m^2) of the flow passage.

9. (original) The inkjet printer as set forth in claim 8, wherein

$(1/18)\cdot g\cdot(2^{1/2}\cdot M)^2/\nu \geq (Lh/Lx)\cdot(Q/S_T)$

where Lh is a height (m) of a highest part of the space from the bottom.

10. (original) The inkjet printer as set forth in claim 8, wherein

the mesh filter is fabricated by intertwining a stainless material into a net.

11. (currently amended) The inkjet printer as set forth in claim 3, wherein

the space in the bubble catching section extends from a height above ~~a height of~~ the outlet up to ~~a highest~~ an uppermost part of the bubble catching section.

12. (currently amended) The inkjet printer as set forth in claim 1, wherein

there is provided a valve between the ink tank and the bubble catching section ~~to open/close a flow passage~~ controlling the flow of ink in said ink supply tube.

13. (currently amended) The inkjet printer as set forth in claim 1, wherein

there is provided a vacuum pump connected with said bubble catching section for discharging bubbles therefrom~~the bubbles are discharged from the bubble catching section using a vacuum pump~~.